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ABSTRACT

A program stressing teacher involvement and classroom implementation of educational research findings is described. The program was designed to familiarize teachers with current findings, have them apply the findings in their classrooms, analyze their own teaching behavior, and critically evaluate the findings in terms of their applicability to the classroom. Elementary teachers from the Murfreesboro (Tennessee) elementary schools participated. Seminars were conducted on research findings in the areas of planning and organization of classroom activities, student time on task, classroom management, and affective teaching skills. Following the seminars, teachers implemented the research findings in their classrooms. They were helped in a collegial way by researchers and also shared and discussed their experiences with other teachers. This report includes lists of specific activities and suggestions developed by the teachers for implementing research findings in the areas discussed in the seminars. The program created a partnership between the researcher and the teacher that was practical, professionally healthy, and realistic. (JD)

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HELPING TEACHERS USE RESEARCH FINDINGS:

THE CONSUMER-VALIDATION PROCESS

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Abstract

This paper describes the Consumer-Validation process which was developed by the authors in co-operation with the Murfreesboro City School System, Murfreesboro, Tennessee. The Consumer-Validation model provides a process for the dissemination of research findings to classroom teachers and also provides a framework for the testing and implementation of research findings in teachers' classrooms. This model is based on the idea that teachers are the ultimate consumers of research on teaching and as such are best equipped to "test" research findings in terms of classroom applicability.

HELPING TEACHERS USE RESEARCH FINDINGS: THE CONSUMER-VALIDATION PROCESS

Robert E. Eaker and James O. Huffman[1]

Although teachers want to improve their teaching and they perceive research on teaching to be a viable way to help them do that, the dissemination of research findings has traditionally been the weakest aspect of practically every major research effort aimed at improving instruction. Most dissemination models rely on the expository mode (verbal and print) to distribute information to teachers. The inherent problems with this approach are obvious.

First, people learn through experience and the full use of their senses. Yet, teachers are often expected to change very personal and complex teaching behaviors through just reading research findings or hearing descriptions of the work that has been done by researchers. This "one-sense," indirect exposure to research just isn't powerful enough to have much impact.

Second, research is almost always reported to have been done by college professors. While college professors may be the people best suited to do educational research, teachers often perceive them as lacking credibility in terms of having a realistic understanding of the world of the classroom.

There is yet another problem associated with traditional dissemination approaches. Many of the reported research findings are perceived by

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[1]Robert Eaker and James Huffman are associate professors at Middle Tennessee State University, Murfreesboro, Tennessee.

teachers as being vague and often contradictory. Teachers sometimes find it difficult to think of specific things they can do in their classrooms in order to benefit from reported research. For example, the research that relates to time on task has important implications for classroom teachers. While teachers accept the notion that increasing time on task pays off in terms of increased student achievement, they have difficulty in conceptualizing specific ways to increase time on task. Suggestions about *how* to implement research findings in the classroom is a factor often missing in dissemination efforts.

Realizing these limitations and difficulties, we developed a plan to disseminate research findings with the Murfreesboro City School System, Murfreesboro, Tennessee, for implementation in the 1979-80 school year. Our idea was to develop a dissemination model that would actually affect the classroom behaviors of teachers. The purpose of this paper is to describe the Murfreesboro Program and provide examples of specific ideas and activities that teachers used in implementing research findings in their classrooms.

Background

The program described in this paper was not the first work done with Murfreesboro teachers in the area of disseminating research findings on teaching. Two previous in-service programs had been conducted in which research findings were described, followed by question and answer sessions. These initial sessions were important. They created an awareness about research on teaching, and, specifically, the work of the Institute for Research on Teaching at Michigan State

University. Secondly, these in-service programs helped to develop a climate that the teachers perceived as non-threatening.

Although these initial sessions did serve some worthwhile purposes, they did not result in teachers trying, to any great extent, to implement any of the research findings in their classrooms. A number of teachers expressed interest in continued study, and a program was proposed that would stress teacher involvement and classroom implementation of research findings. This program was available to any teacher who chose to participate.[2]

Goals of the Program

In conceptualizing and developing the program, the following goals emerged:

1. *Make teachers familiar with current research findings in the area of teacher behavior.* One of our primary goals was simply to provide teachers with a knowledge base about research on teaching. The idea was to use not only the research findings being generated by the Institute for Research on Teaching, but the findings of other such researchers as Good, Rosenshine, Soar, and Kounin.
2. *Improve individual teaching skills by having teachers apply the research findings in their classrooms.* The ultimate goal of the program was the improvement of classroom teaching. The program was designed to attempt to bridge the gap between research and practice.
3. *Have teachers become more analytical about their own teaching behavior.* We hoped that the program would have

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[2]Many teachers earned graduate credit or in-service points through participation in this program.

the carry-over effect of stimulating teachers to reflect on their teaching. We felt that the process of self-analysis or reflective thinking would continue to pay dividends even after the program was over.

4. *Have teachers critically evaluate research findings in terms of their applicability to the classroom.* An important goal of the program was to develop the idea that teachers, as consumers of educational research, need to test research findings in their classrooms, just as various consumer groups test products. This process conceivably would validate research findings. Teachers might more readily try to incorporate findings in their classrooms that other teachers had found helpful. Additionally, this validation process would generate new questions for researchers to investigate.

Some Basic Assumptions

In order to achieve the program goals we developed a plan that was based on the following assumptions.

First, we assumed that the quality of interpersonal relations would be a key factor in achieving the program goals. We were aware that the word "research" inherently scares many teachers, and we were concerned that because the program was to focus on teachers' classroom behavior, many teachers might become nervous or anxious. If the plan were to encourage experimentation, creativity, and imagination it would need to be as non-threatening as possible.

Secondly, teachers would need to feel secure in their knowledge and understanding of particular research findings. We assumed that

unless teachers developed a clear understanding of particular research findings, the chance of them changing their teaching behaviors would be remote.

Our third assumption was that the plan would have to focus on classroom teaching behavior. In other words, if teachers were to improve their teaching, the plan would need to shift emphasis from the university classroom where teachers are told about research to the teachers' classrooms where they could use, apply, and test research.

Finally, we felt that a record or data base should be generated as teachers worked with the research findings. If teachers were to reflect on the effects of their teaching, and if they were to share information with others, then some sort of format needed to be developed in which teachers' ideas, activities, insights, criticisms, attitudes, and feelings could be recorded.

Design of the Murfreesboro Program

In order to achieve this variety of goals, the plan that eventually emerged contained four different types of activities.

Seminars

It was decided that research findings needed to be presented to the teachers with opportunity for discussion, so we set up a series of seminars. The crucial aspect of these seminars was enabling teachers to gain a clear understanding of selected research findings. In order to make the process as understandable as possible we decided that the program would focus on only four research areas, and that these areas would be dealt with one at a time. The research areas were:

1. Planning and organization of classroom activities.

2. Student practice and time on task.

3. Discipline and classroom management.

4. Affective teaching skills.

Research findings in each of these areas were synthesized and made as clear and concise as possible. This process of gathering, synthesizing, and translating research findings so that they could be more easily understood by teachers became the cornerstone of the Murfreesboro program.

At each seminar, research findings were presented and discussed. When the teachers indicated they felt that they understood the research findings, they were given a form to fill out. This form became the record-keeping aspect of the program.

The Research Record Form

These forms contained three parts. They were simple and open-ended.

Part one described the research findings in a particular area of focus--for example, planning and organization of classroom activities.

Part two of the form consisted of a blank page with the heading, "Description of Classroom Behaviors Engaged in While Attempting to Implement the Above Research Findings." In this section, teachers were asked to list and briefly describe the things they did in their classrooms as they attempted to implement research findings.

Part three of the form was another blank page with the heading, "Analyze What You Think and Feel About What Happened When You Tried Each of the Behaviors Listed in Part Two." The primary purpose of this section of the form was to have teachers reflect on the results of their classroom behavior. This section encouraged teachers to

become more analytical about their teaching. Also, this part of the form was designed to have teachers critically evaluate the research findings that they dealt with, and to later enable them to share their findings and feelings with each other.

Classroom Visitations

After each seminar, teachers attempted, for a two-to-three week period, to implement the research findings that had been presented. It was recognized that there would be a wide range of teacher needs during these implementation periods. Some teachers would simply need reassurance, while others might need someone to actually demonstrate or make specific suggestions as to things they might try. We felt that the success of the program hinged to a great extent on classroom visitations.

The classroom visitations were not so much observational in nature, but rather were designed to be collegial and helpful. Often a great deal of time was spent with an individual teacher in a particular school. On other occasions, meetings were held with groups of teachers in a particular school. There was no set format or procedure for the classroom visitations.

The Sharing Sessions

After teachers spent two to three weeks developing ideas and activities in their classrooms, they met together in a seminar to discuss and share what happened during the classroom implementation phase of the program. These sessions served a couple of purposes and proved to be very beneficial.

The first and most obvious purpose of these sessions was a sharing of activities or ideas that teachers came up with while attemp-

ting to implement findings from a particular area of research. For example, after the teachers had worked on increasing time on task, they brought ideas like the following to the sharing seminar:

1. Children keep a marker in their reading books so they can turn quickly to a new story or return to the place where they were previously reading.

2. Consumable workbook pages are removed daily for checking. That way, children begin on the first page of their workbook.

3. A child having difficulty staying on task is surrounded by children who have good work habits.

4. Tutors, student teachers, and volunteers engage individual children in spending more time on task.

Because the teachers shared their ideas and activities with each other, the quantity of ideas that each teacher learned was increased. For example, the teachers came up with approximately 34 separate ways of improving organization and planning for instruction.

Of course, not all the things teachers tried worked. Some ideas had very positive effects, while the effects of others were marginal. Still others, while they may have been good ideas, just did not seem to work well in the classroom. This type of teacher analysis and evaluation was the second important aspect of these sharing sessions. Teachers learned to evaluate research findings and at the same time they became more analytical about their own teaching.

A major goal of these sessions was to have teachers interact with each other about teaching. One teacher pointed out that teaching is rarely the focus of meetings teachers are asked to attend.

One last point should be made about these sharing sessions. Teachers perceived the ideas of other teachers to be more credible than those of university professors. In other words, rather than relying on professors trying to sell ideas to teachers, these discussion sessions capitalized on teachers sharing experiences with each other.

Activities Developed by Teachers for Implementing Research Findings on Teaching

Much reported research often does not provide teachers with specific ideas for implementation. As was explained previously, teachers were asked to record activities that they developed and tried in their classrooms under the four research areas. We list here some ideas and activities that teachers developed in the Murfreesboro program.[3] Some are quite simple and obvious, while others are more creative and complex. Since the Murfreesboro System consists of grades K-6, the activities were developed by elementary teachers for elementary classrooms. Also, it is important to remember that these lists represent the work of a group of teachers who attempted to improve their teaching by using the findings of research on teaching studies.

Some Specific Activities Related to Organization and Planning

1. The teacher frequently checks and discusses written work with individual pupils. The work is stapled together and sent home to parents periodically.

2. To control traffic when restrooms are located outside the classroom, an appropriate number of passcards labeled "Boys" and "Girls" are provided. Each pupil takes a card when leaving the classroom. Other children may leave only when a card is available.

3. Children's papers are checked during rest time, having one child discuss his/her work with the teacher at a time.

4. Children line up alphabetically.

5. When groups of children change classrooms, a card labeled with the teacher and subject is held up to indicate where lines should be formed.

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[3]The activities and ideas listed in this section were developed by teachers of the Murfreesboro City School System. They were edited and synthesized by Margaret Salisbury, a supervisor in the Murfreesboro School System, and Frank Turner, principal of Hobgood Elementary School.

6. Seating is arranged so that each child can see the board, chart, or whatever is the focus for instruction.

7. The teacher positions her/himself so that all pupils can see and be seen.

8. Prior to the pupils going to activities outside the classroom, materials are distributed in readiness for the activity to be conducted upon their return.

9. Brief breaks are scheduled between lengthy periods of instruction.

10. Pupils are immediately rewarded for entering the room in a quiet and orderly manner.

11. Pupils' work and contracts are kept by pupils in pocket folders.

12. A time is provided for sharpening pencils. A loan arrangement provides pencils at other times to avoid sharpening when it would be disruptive.

13. A buddy system is employed to improve conduct going to and from restrooms.

14. The instructional area of the media center is arranged to avoid the direct flow of traffic.

15. Audio-visual materials are set up before a group of pupils enter.

16. Materials to be used in the lesson are arranged sequentially.

17. Names of students are learned through the use of name tags, oral data, pupil surveys, questionnaires, and autobiographies.

18. Class officers assume responsibility for many routine activities.

19. Use a "clock" with movable hands to show a child the time at which s/he is expected to complete a task.

20. Suggest to children that they imitate an animal to get desirable behavior. Example: "Walk in the hall as quietly as a mouse."

21. Pupils' names are called softly to improve listening.

22. Children returning from the restroom tap another child to indicate it is his/her turn.

23. To insure that each child has opportunity to participate, name cards are used. The teacher removes a name card as each child is called on.

24. To avoid the confusion of staggered dismissal, all children prepare for dismissal prior to a final, quiet activity, during which children leave quietly at the correct time.

25. When possible, desks are used, even for small-group instruction, to avoid confusion and disruption when using materials such as workbooks.

26. Class is begun with an activity that requires participation of all children. Example: echo--clapping.

27. Abbreviated signs printed on cards are used to signal a specific behavior. Example: SSS signals "stand, stretch, sit"; CU signals "clean up"; D signals permission to "go for drink."

28. To manage milk money, each child is given an envelope with his/her name on it. Money is deposited in the envelope and left on the teacher's desk until needed.

29. Helpers are selected for one week rather than for each day.

30. Students maintain a small notebook to record assignments, special events, and the like, to be initialed by parents.

31. A loud voice is avoided. A conversational voice is used when addressing students in the gymnasium. This tends to quieten the group.

32. When questionning, call on individual students in order to avoid loud, choral, spontaneous (often thoughtless) answers.

33. The teacher locates him/herself in the area to which groups are called or assigned. This is conducive to more orderly behavior.

34. For manipulable activities, young children work in very small groups.

Some Specific Activities Related to Time on Task

1. Children who complete assignments on time are given tickets for special privileges.

2. An activity center provides opportunities for children who complete assignments early.

3. Parent volunteers come once a week to hear children say their word lists.

4. Children check out packets of flash cards to take home for practicing number facts.

5. Confer with each child once weekly to discuss his/her work in detail.

6. Work not completed at school is taken home to be completed.

7. Seating is arranged to reduce students being distracted from their work.

8. Study time is supervised by the teacher and help is given as needed.

9. A child having difficulty staying on task is surrounded by children who have good work habits.

10. Tutors, student teachers, and volunteers engage individual children in spending more time on task.

11. SRA kits and similar activity programs provide independent, supplementary experiences to increase individual reading skill.

12. After a reading lesson, children go to a listening center for a reinforcement activity and then utilize a worksheet on the same skill/concept.

13. Individual contracts are used, enabling students to work toward their individual objectives in any segment of time available to them.

14. Ribbons are awarded to children who demonstrate improvement as a result of at-home practice.

15. A booklet is made for each child in which s/he pastes pictures, cut from magazines at home, to illustrate consonants being learned at school. When the booklet is returned, a star is given for the work.

16. Children are asked to listen for sounds on their way to and from school to heighten their awareness of and response to sound.

17. A booklet of math activities for use at home is given to children needing reinforcement. Parents are given directions for use of the material.

18. Home study packets are given to students on the first day of the school week. These may contain handwriting sheets, phonics exercises, flashcards, or puzzles. Work is returned and checked on Fridays.

19. Free play is the reward for students who are dressed appropriately and on time for gym activities.

20. A bell is used to signal getting ready for a new task, changing centers, and the like.

21. Children keep a marker in their reading books so they can turn quickly to the new story.

22. Consumable workbook pages are removed daily for checking. Children then always begin on the first page of their workbook.

23. Children are given a topic that will be discussed the following day. They are asked to find one related fact for sharing.

24. The music teacher incorporates activities to reinforce and support instruction in other curriculum areas.

25. Students make up their own games to reinforce learnings.

26. A daily master schedule is given to students to encourage on-time performance.

27. Upon entering the classroom, students begin work on a math challenge that has been placed on the chalkboard.

28. Appropriate reward is given to those students who demonstrate responsibility for being prepared for learning experiences on time--have pencil, paper, books, and other material ready for use.

Some Specific Activities Related to Classroom Discipline

The following activities/practices are letter coded:

A - Withitness

B - Overlapping

C - Group Focus

D - Movement Management

1. A routine schedule and the same basic procedures are maintained daily. (D)

2. Questions are stated before a child is called upon to respond. (C)

3. "Buckets" containing crayons, scissors, glue, and the like are placed on each table where these materials are needed. (D)

4. Children are seated together when the teacher talks to them as a group, thus avoiding the necessity for being heard by children scattered throughout the gymnasium. (A) (Physical Education Class)

5. When introducing a new activity, the procedure is illustrated on a chart or portable chalkboard. (D) (Physical Education Class)

6. Students are "walked through" new activities when this is helpful. (D) (Physical Education Class)

7. If a child misbehaves while directions are being given, the teacher stops, uses non-verbal cues to indicate disapproval, and waits a reasonable time for the child's attention. (A)

8. A misbehaving child is told what is expected of him/her and what will happen if s/he does as s/he is asked--a positive approach. (A)

9. A child is assigned to greet visitors to avoid disrupting teacher instruction. (B)

10. Worksheets are placed where children can begin work immediately upon arrival. (D)

11. When questioning, the teacher waits for most children to respond by raising their hands before calling on a student. (C)

12. Children are helped to anticipate activities for the day in an early-morning planning session. (C)

13. A large cardboard poster displaying the numeral "3" reminds children that only three pupils should be at the water fountain at one time. (B)

14. Directions are given without pupil interruptions. Questions and requests for clarification are then entertained. (D)

15. A visitor entering the room is recognized non-verbally by the teacher who then waits for an appropriate time to speak with that person. (B)

16. Materials for the next activity are distributed while students participate in an activity not requiring teacher direction. Example: the singing of a familiar song. (D) (Music Class)

17. Students track/record their own behavior patterns on a simple checklist using happy or sad faces. These are then taken home for parent signatures. (A)

18. Plan and give specific information for independent activities to be pursued by students who finish assignments early. (B)

19. Students are motivated and alerted by teacher statements such as "Think about this" or "Be careful." (C)

20. Equipment is taken away from children when they are misusing it. (A)

21. The purpose or value of a physical education activity is explained to the pupils. (C)

22. When a child is having difficulty answering a question orally the teacher uses what the child says to encourage and guide him/her in this effort. (A)

23. Student teachers are prepared to conduct change-of-pace activities when they need to take over due to the teacher's being interrupted. (B)

24. The teacher moves to the misbehaving child and in some way, perhaps non-verbally, indicates awareness of this behavior without breaking the pace of the lesson. (A)

25. When several children need the teacher's help at the same time, s/he maintains eye contact with the one receiving assistance while touching others to indicate awareness of their presence/needs. (A)

26. The teacher avoids calling on pupils in an obvious, predictable pattern. (C)

27. After one pupil responds to a question, others are involved by the teacher asking, "Do you agree?" (C)

28. To keep children alert, the same pupil is often called on several times in a brief period of time. (C)

29. When tests are being given, a meaningful assignment is written on the board to provide for those who complete the test early. (D)

30. After working with each reading group, the teacher moves about in the room to monitor individual activities and give assistance where needed. (A)

31. The teacher makes it a point to sit with pupils who misbehave in the lunchroom. (A)

32. Pupils' names are used by the teacher in stories being told to teach or illustrate a concept. (C)

33. A misbehaving child is given a leadership experience requiring him/her to be a good example. (A)

34. When it is desirable for children in a group to focus careful attention on the teacher, they are told that they may be called on for this activity only by the teacher pointing to an individual child. (C)

35. Game activities are used to achieve desirable behavior. Example: A magic spell is cast on children to keep them quiet for an activity such as preparation to go home. (D)

36. Establish with children what procedures are to be followed when the teacher is interrupted. Materials for this are kept at hand. Example: desk readers. (B)

37. Pupils often check their own work when this can be a learning experience for them. (Children enjoy using red pencils for this purpose.) (C)

38. General rules of behavior are set at the beginning of the school year. The teacher's attitude is a positive one that indicates anticipation of cooperative behavior. (A)

39. When a question is asked, several children are called on by name to think about the appropriate response should the one recognized to answer need help. (C)

Specific Activities Related to Affective Education

1. When a student is insecure at the beginning of school or when a new student comes in, another student is asked to be his/her buddy, helping him/her to become familiar with classroom routines and procedures.

2. If a child is troubled for any reason (problems at home, for example), s/he is kept especially busy with pleasant, meaningful activities.

3. The teacher sits by a different student each day at lunch and engages the student in conversation about his/her personal interests.

4. The teacher calls the home to inquire about children when they are absent.

5. When a student writes a good story or poem, it is read to the class.

6. The teacher comments when s/he notices a student with a new hair style, wearing new clothing, or any other such thing.

7. The teacher occasionally joins pupils in their playground activities.

8. The teacher is careful to listen if a pupil needs to talk about losing a pet or a similar difficult experience.

9. The teacher occasionally shares a funny or unusual personal experience with pupils.

10. The teacher shows interest in pupil's outside activities such as soccer, Scout activities, basketball, baseball, and the like. (Local newspapers are a source for such information. Clippings may be displayed in the classroom.)

11. On the last school day of each week, pupils take home "brag sheets" which summarize their behavior and performance for that week.

12. Both the acceptable and deviant behavior of characters in stories are discussed with pupils.

13. The teacher attempts to greet each child personally when s/he arrives in the morning.

14. The teacher arranges for a weekly conference with each pupil, encouraging the sharing of any concerns.

15. When a parent comes to join his/her child for lunch, two friends are selected to sit with them at the guest table.

16. The teacher makes much use of pupils' names, birthday tags, helper tags, charts, and the like.

17. After a child has been absent one day or more, the teacher makes it a point to welcome him/her when s/he returns. This is done before the class so that the child feels this is a welcome from the entire group.

18. The teacher occasionally serves hot chocolate on a snow day when school begins late.

19. The teacher sometimes serves cookies as a way of saying "thank you" for good work or behavior.

20. Occasionally a child is allowed to give a performance of something learned elsewhere (play piano or other instrument, dance).

21. Student interests are accommodated by some attention to lives of currently popular musicians.

22. When feasible, the physical education teacher administers first aid rather than sending a child to the clinic.

23. When a pupil is hospitalized, the teacher visits him/her.

24. The teacher is careful to respond enthusiastically to children in out-of-school situations--for example, at the grocery store.

25. When there is appropriate opportunity, students get to meet/know other members of the teacher's family.

26. Children's successes are posted. Example: "I can tie my shoes."

27. A "star of the week" (a pupil) is featured on a bulletin board. Pictures, hobbies, art work, and other items important to the child may be displayed.

28. Suitable game activities are used in brief segments of time after work is finished.

29. Students are welcomed with a bulletin board. Example: records are made from art paper, students' names printed on them to be displayed on the bulletin board.

30. Opportunity is provided for students to record, on tape, information about themselves, and the tape is played back for the class.

31. A bulletin board about one child features a book in which his/her classmates may write positive statements only about that child. (This child is designated as the special child of the week.)

32. Each group of five children draws a composite picture of an individual using the best features of each member of its group to compose the picture.

33. The teacher makes a conscious effort to be him/herself, to be genuine.

34. The teacher is alert to opportunities for encouraging pupils to help one another with problems.

35. Through total acceptance of each student, the teacher attempts to establish a climate of mutual respect. Feelings of individual worth are enhanced by a touch, a compliment, a personal conversation.

36. One child draws the name of another child from a box. S/he then says something complimentary about the child.

37. The teacher makes an effort to mention in conversation with pupils common interests, mutual friends, relatives, hobbies, and so on.

38. Care is taken to display pictures and similar materials at pupils' eye level.

39. When the librarian observes good behavior on the part of an often troublesome child, s/he immediately gives him/her a certificate of good behavior to take back to the classroom.

Reflections

As a result of the work with the Murfreesboro City School teachers, we learned some features necessary for successful dissemination plans. One feature is the necessity of a person whose role it is to study research findings, interpret those findings for classroom teachers,

demonstrate them in classrooms, and analyze with teachers the results of their efforts to improve instruction.

Those who find themselves in such roles (teacher educators, supervisors, principals, for example) must possess certain skills to be successful. First, they must be interested in and know about research efforts that focus on classroom teaching. Although they do not have to possess the skills necessary to do research, they must value the work of the researcher and educational research in general. Too, those who fill this role must understand and be familiar with the world of the classroom teacher. Researchers are often lacking in recent K-12 teaching experience, and this causes a lack of credibility with classroom teachers. A person who is knowledgeable of research, yet has close association with classroom teachers, can bridge this credibility gap. Finally, this role requires a person who has effective interpersonal and communication skills. Teaching is a very personal behavior. A person who works with teachers in attempting to bring about improved teaching must be sensitive, empathetic, and possess the skills necessary to create a climate of trust and enthusiasm.

The second important feature is a conceptual framework for collaboration with teachers. The term "consumer-validated research" reflects the idea that teachers should and can play an important part in developing and testing ideas for instructional improvement.

This consumer-validation process creates a body of research findings that teachers might more readily try to incorporate in their classrooms because other teachers found them helpful. In addition, the process of implementing and testing research findings in classrooms generates new questions for researchers to investigate.

If the ultimate goal of research on teaching is the improvement of instruction in schools, then thought needs to be given to finding new and better ways of bridging the gap between research and classroom practice. This in itself should be an important focus of research. The use of research findings on teaching by various role groups such as principals, supervisors, and teacher educators should be investigated. Also, studies focusing on the effects of various modes of research dissemination such as distribution of printed material, professional meetings, inservice programs, teacher center activities, and teacher education programs are needed.

Obviously, there are some things that researchers can do best, and there are things that teachers are uniquely equipped to do. The program described in this paper created a partnership that was practical, professionally healthy, and realistic. Perhaps the Murfreesboro program and its consumer-validation approach can serve as a conceptual model for the development of new and better ways to help teachers make use of research findings.